In re Appln. of Andres Vega-Garcia et al.
Application No. 09/157,884

*REMARKS*

Claims 1-2, 4-8, 18-26, 28-29, and 31-42 are pending in this application, stand rejected, and are at issue herein.  Reconsideration of claims 1-2, 4-8, 18-26, 28-29, and 31-42 in view of the following remarks and indication of their allowability at an early date are respectfully solicited.

The Examiner has objected to claim 23 under 37 C.F.R. §1.75 as being a duplicate of claim 22.  This ground of objection is respectfully traversed.  Specifically, while both claims 22 and 23 are directed to a machine readable medium, claim 22 comprises instructions for implementing the modules of claim 21, while claim 23 comprises instructions for implementing the method of claim 21.  As should now be clear, claims 22 and 23 utilize different wording, are of different scope, and are clearly not duplicative of one another.  Therefore, the applicants respectfully request reconsideration of this ground of objection and indication of the allowability of claims 22 and 23.

The Examiner has rejected claims 1, 18, 21, and 24 under 35 U.S.C. §103(a) as being unpatentable under Smith et al. (U.S. Patent No. 6,128,649) in view of ITU-T H.323 Centralized multipoint configuration/clarification, Northlich, B., Onlive Technologies, Inc., Feb. 1997 (Northlich hereinafter).  The applicants have fully considered these references and the Examiner's rational for combination and application thereof, but must respectfully traverse this ground of rejection.  Reconsideration of this ground of rejection and indication of the allowability of claims 1, 18, 21, and 24 at an early date in view of the following remarks are respectfully solicited.

It is axiomatic in the patent law that, in order to support a *prima facie* case of obviousness, each and every limitation required by the claims must be found in the combination of references.  However, independent claim 1 requires, *inter alia*, that at least one of the transmitters includes a silence suppressor for removing silences or background from the data streams of the audio signals transmitted by the said at least one transmitter.  As described in the originally filed specification, "the data passes first through silence suppressor 663 to reject data, for example, silences or low-level background sounds, which provide little or no useful information and would otherwise waste available bandwidth."  Specification, page 10.  As

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described therein and as recited in independent claim 1, the silence suppressor simply removes from the transmitted data stream silences or background so that the available bandwidth is not unduly wasted by transmitting this information which provides little or no useful information as part of the data stream. It is important to note, that while this data forming part of the data stream is rejected by the silence suppressor, the data stream itself, sans silences or background, still continues to be transmitted by the transmitter. That is, the data stream is not shut-off or switched, but is merely transmitted with this useless data removed therefrom.

To meet this limitation the Examiner cites to Smith et al. '649, column 9, lines 5-9, and correctly recognizes that Smith et al. '649 actually removes the identified streams from the audio transmission by closing that audio channel. Specifically, Smith et al. '649 states that the thread removes display streams corresponding to silent audio channels in column 9, lines 34-36, lines 40-43; column 10, lines 19-22, lines 25-27, etc. That is, the system of Smith et al. '649 removes the entire data stream from one of the conference participants from the audio channel if that conference participant is currently silent when a violation of one of the outlining constraints described in Smith et al. '649 occurs.

Unlike the system of Smith et al. '649 which removes the entire data stream from a silent conference participant, independent claim 1 does not remove the data stream of a silent conference participant. Instead, the data stream from the conference participant is allowed to continue to be transmitted, albeit with silences or background data removed from the data stream. However, the data streams of the audio signals are continued to be transmitted with this silence or background data simply being removed to conserve bandwidth. The system of Smith et al. '649 does not remove such extraneous data from the data stream, but instead entirely switches the data stream from one participant to another when one of its constraints has been violated. This complete removal of a silent data stream is completely foreign to the requirements of independent claim 1. Additionally, this lack of teaching or suggestion of this required element is not remedied by the combination with Northlich, which does not address any such silence suppression. As such, the applicants respectfully submit that independent claim 1, and those claims dependent thereon, are not rendered obvious by a combination of Smith et al. '649 with Northlich. Reconsideration of this ground of rejection and indication of the allowability of claims 1-8 are therefore respectfully solicited.

In addition to the reasons stated above, independent claim 1 also requires, *inter alia*, the inclusion of a demultiplexer for dynamically selecting a subset of the set of data streams. To meet this limitation the Examiner cites to a brief description from the background of the invention section of a multicast control unit that multiplexes or mixes and distributes video streams transmitted by the network to and from the users, forming a centralized topology. However, nothing in this description describes any demultiplexing of the mixed signals at any one of the users to which the mixed data stream is transmitted. Indeed, this section cited by the Examiner continues to explain that all of the video streams are added together in separate windows in a single output video stream, which is then sent to each of the users for display. This section concludes by describing that the MCU outputs to each of the users video and audio streams. This section clearly indicates that separate audio and video streams are sent to each of the users. In such a case, there is no need for a demultiplexer since it appears that separate video and audio streams are sent to each of the users.

Despite citing to the MCU of a prior centralized topology described in the background of the invention section, the Examiner then cites to the dynamic selection controller 13 of the system of Smith et al. '649 for performing the functions required by the demultiplexer of claim 1. However, the dynamic selection controller 13 is not an MCU, and indeed does not receive any data streams whatsoever. Instead, the user 10 sends its selection policy to the dynamic selection controller 13 which then makes selection requests of the network. Based on these selection requests, the selected media streams from the other users are then sent from the network to the user. Within the user, the D/T stream (reception) processing modules receive "a stream from the network connection, and [perform] all of the necessary steps required for the proper presentation of the stream to the user. These will be specific to the type of media that constitutes the stream..." Smith et al. '649, column 20, lines 11-18. Clearly, each of the reception processing modules receive only a single data stream of a particular type. These individual streams are illustrated in Fig. 5b as originating from the network, and do not pass through any type of demodulator whatsoever.

Despite the system of Smith et al. '649, which utilizes the dynamic selection controller to request only selected media to be transmitted to the user based upon the user selection policy, and which utilizes individual input stream reception modules to process these individual streams received from the network, the Examiner has proposed modifying the system of Smith et al. '649

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with the teachings of Northlich. In particular, the teachings of page 2 of this clarification paper which states that the terminal "should de-multiplex RTP streams based on SSRC and payload type, and nothing else (especially not transport address)." However, since the streams received by the system of Smith et al. '649 are individual streams originating from the network, there does not appear to be any stream needing to be demultiplexed whatsoever. As such, one skilled in the art would not look to the teachings of Northlich when provided with the system of Smith et al. '649 as there are no multiplexed streams for which a demultiplexer would be useful. Indeed, modifying the system of Smith et al. '649 to utilize a single multiplexed stream of data that then needs to be demultiplexed based on SSRC and payload type changes the principal of operation of Smith et al. '649. Smith et al., '649 currently relies upon a selection policy and a dynamic selection controller to provide selection requests to the network so that the network may transmit individual selected media streams to the user. Such modification of the principal of operation is specifically precluded by MPEP §2143.01. As such, the applicants respectfully submit that independent claim 1, and those claims dependent thereon, are not rendered obvious in view of this proposed combination of references. Reconsideration of independent claim 1, and those claims dependent thereon, in view of the foregoing are therefore respectfully solicited.

Further, this traversal of the combination of Smith et al. '649 with Northlich applies to all of the currently pending claims of this application. That is, regardless of the limitations of any individual claim, the applicants respectfully assert that the combination of Smith et al. '649 and Northlich is inappropriate because such a combination would change the principal of operation of the system of Smith et al. '649 and because there is no suggestion or motivation to support such a combination. As articulated above, the system of Smith et al. '649 does not receive an individual modulated data stream. Instead, the system of Smith et al. '649 receives a number of individual data streams, each of which being received by a D/T stream reception processing module. With such a topology, one skilled in the art would not be motivated to utilize a demultiplexer, let alone a demultiplexer that operates based on SSRC and payload type. Therefore, the applicants respectfully request reconsideration of all grounds of rejection of all of the claims of the pending application as each ground of rejection relies, at least in part, on this combination of references.

The Examiner has rejected claims 2, 4-8, 19-20, 22-23, 25-26, 28-29, and 31-42 under 35 U.S.C. §103(a) as being unpatentable over Smith in view of Northlich, and further in view of

H.323 ITU-T: Audiovisual and multimedia systems (H.323 hereinafter). This ground of rejection is respectfully traversed. Reconsideration of this ground of rejection in view of the foregoing and following remarks and indication of the allowability of these claims are respectfully solicited.

The applicants wish to respectfully reiterate their traversal of the combination of Smith in view of Northlich discussed above. The applicants respectfully submit that this traversal is sufficient standing alone to warrant an indication of allowance of all claims pending in this application as this proposed combination forms the basis for the rejection thereof. Therefore, reconsideration of this ground of rejection and indication of the allowability of claims 2, 4-8, 19-20, 22-23, 25-26, 28-29, and 31-42 are respectfully solicited.

In addition to the above traversal of the combination of Smith and Northlich, the applicant's also respectfully traverse the additional combination of H.323. Specifically, the Examiner's statement of suggestion or motivation is conclusory in nature, stating that one would "have to look at pertinent art directed to the processing of audio/video data in a conferencing environment" and that "Audio Codecs particularly of G.711 and G.723, are known as standard." However, the mere fact that the H.323 reference is in the same field of art and that G.711 and G.723 are known standards are not sufficient to support the Examiner's conclusory statement that one skilled in the art would be motivated to make such a combination to "enhance the capabilities of the conference system enabling participants of different capabilities to communicate." Further, the Examiner's "Official Notice" that a mixer is old and well known in the art also cannot support such a combination of references or the rejection of claim 5. The Examiner merely stated that the motivation of using such a mixer "would be to render a composite audio signal to the user." However, as discussed above, the system of Smith et al. '649 utilizes individual inputs to individual D/T stream (reception) processing modules. Therefore, the applicant's respectfully submit that one skilled in the art would not be motivated to utilize a mixer as such would change the principal of operation of Smith et al. '649 which requires individual D/T stream (reception) processing modules for receiving "a stream" from the network connection.

In view of the above, the applicant's respectfully submit that claims 2, 4-8, 19-20, 22-23, 25-26, 28-29, and 31-42 are not rendered obvious as the proposed combination of references
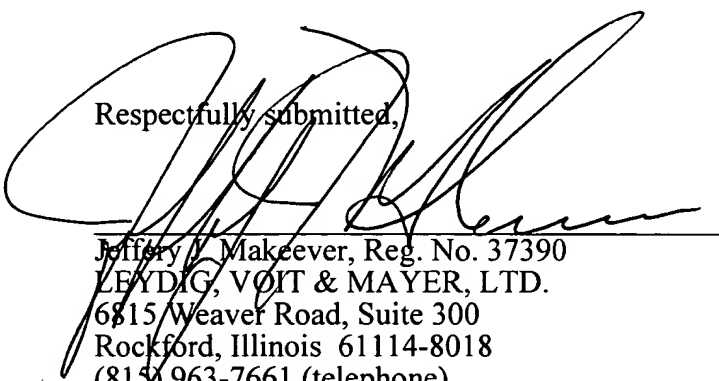
cannot be supported as required by the MPEP in Federal Circuit case law, and is therefore improper. Reconsideration and allowance of these claims are therefore respectfully solicited.

In view of the above, the applicant's respectfully submit that claims 1, 2, 4-8, 18-26, 28, 29 and 31-42 are in condition for allowance. Reconsideration of these claims and indication of their allowability at an early date in view of the foregoing remarks at an early date are respectfully solicited.

If the Examiner believes that a telephonic conversation will aid in the resolution of any issues not resolved herein, the Examiner is invited to contact the applicant's attorney at the telephone number listed below.

Respectfully submitted,

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